#### **ENVIRONMENTAL CHEMISTS**

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947

Date Samples Extracted: April 12, 1996 Date Extracts Analyzed: April 12, 1996

# RESULTS FROM THE ANALYSIS OF PROCESS WATER SAMPLES FOR IRON

#### **USING METHOD 6010**

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	<u>Iron</u>
M52947 A (small tank)	20,000
M52947 B (small tank)	19,000
뉴요하는 <sup>68</sup> 로 하다 다 있습니다. 그리고 있는 글 한 모양하는 말	
Method Blank	<1

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947

# QUALITY ASSURANCE RESULTS FOR IRON BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Samples Processed Using Method 3005A

Laboratory Code: 67838 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent	Acceptance
Analyte:	Units	Result	Result	Difference	Criteria
Iron	mg/L (ppm)	19,000	19,000	0	0-20

Laboratory Code: Spike Blank

	Reporting	Spike	% Red	covery	Acceptance	Relative Percent
Analyte:	Units	Level	 MS	MSD	Criteria	Difference
Iron	mg/L (ppm)	1000	112	109	80-120	3

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947 Date Analyzed: April 12, 1996

# RESULTS FROM THE ANALYSIS OF PROCESS WATER SAMPLES FOR SPECIFIC GRAVITY @ 15.56 °C

Sample ID	Specific Gravity
M52947 A (small tank)	1.16
M52947 B (small tank)	1.13

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947

#### QUALITY ASSURANCE RESULTS FOR SPECIFIC GRAVITY

Laboratory Code: 67838 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent
Analyte:	Units	Result	Result	<u>Difference</u>
Specific Gravity	@ 15.56°C	1.13	1.13	0

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947 Date Analyzed: April 12, 1996

# RESULTS FROM THE ANALYSIS OF PROCESS WATER SAMPLES FOR ACID BY VOLUME

Results reported as %

Sample ID	% Acid by Volume
M52947 A (small tank)	7.9
M52947 B (small tank)	1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: April 16, 1996 Date Received: April 11, 1996 Project: Acid Tanks, PO #M52947

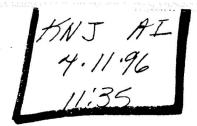
#### QUALITY ASSURANCE RESULTS FOR % ACID BY VOLUME

Laboratory Code: 67838 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent
Analyte:	Units	Result	Result	Difference
Acid	% by Volume	7.5	7.5	0

12.11.12.14.1 & BRUYA, INC.
10.12.14.14. Avenue West
10.14.14. VA 98119-2029
10.20.12.25-8282

# SAMPLE CHAIN OF CUSTODY



Sena Report To: Alask	AN Copper	e Works		Contact_C	TERALD Thompson
Addiss 068 H	Autord S	T 98134		3353	
	38-2-8379			Date	-11-96
SITE NO.	•	PROJE	CT NAME	=	PURCHASE ORDER #
7.13 <b>3</b>		Acid T	ANKS	·	1 52947
SANGLEAS (signature)					PROJECT LOCATION
1 55		>			200 6th ALE S.  AMPLE DISPOSAL INFORMATION
BLNISHES			<del></del>		Dispose after 30 days
					Return Samples
The transport of the trade of t	Date/Time	Type of	# of	Lab	Call for Instructions Analyses
Sample #	Sampled	Sample	Jars	Sample #	Requested
11 92 347A	10:20 4/11	HN03	7	67837	% of HNO3, 5.G.
(Small Tank)		<u> </u>			FE
10 (14-11) (14-11)					
er engel community was a second of the secon	1 10	<u> </u>			
19 19 29 44 TS	10,00 4/11	1+NO3	/	67838	% of HNO3, SG.
( ( tank)			<del></del>		T FE
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f Kolon	ing (17)	ry sur,	U6-	461	7/11/96 11:00
V.	0	(			,
For a read by:					

09/19/94

#### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

April 16, 1996

#### INVOICE # 96ACU0416-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Acid Tanks, PO #M52947: Results of testing requested by Gerry Thompson, Project Manager for material submitted on April 11, 1996.

2 process water samples analyzed for	
Aron 공기가 사용하는 경우 가장 사용하는 사람들은 것은 일반한 것을 다 했다.	
using Method 6010 @ \$35 per sample	\$ 70.00
2 process water samples analyzed for Specific Gravity	
@ \$25 per sample	50.00
이 말에 가는 살을 가는 가는 가는 가는 살을 가는 것을 다 했다.	
2 process water samples analyzed for % Acid by Volume	
@ \$25 per sample	50.00
일어보다 가는 가는 것은 것들은 가는 사람들이 되었다. 그는 사람들이 되었다.	
Amount Due	\$ 170.00

#### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

April 16, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on April 11, 1996 from your Acid Tanks, PO #M52947 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

keh

Enclosures

FAX: 382-7335 ACU0416R.DOC